

What is claimed is:

(Claim 1) 1. An apparatus of measuring wastewater concentration for determining discharge rate of wastewater from a wastewater-collecting tank, the apparatus comprising:

a mixing tank having a first pipeline;

a measuring tank communicated with the mixing tank via the first pipeline;

a water supply unit having a second pipeline, wherein the water supply unit is communicated with the mixing tank via the second pipeline;

a wastewater supply unit having a third pipeline, wherein the wastewater supply unit is communicated with the mixing tank via the third pipeline and is communicated with the wastewater-collecting tank;

a concentration detector located in the measuring tank;

a controller connected electronically with the water supply unit, the wastewater supply unit, and the concentration detector, respectively; and

a monitor connected electronically with the controller for displaying operating status of the water supply unit, the wastewater supply unit, and the concentration detector.

(Claim 2) 2. The apparatus of measuring wastewater concentration as in claim 1, further comprising a pH detector located in the measuring tank.

(Claim 3) 3. The apparatus of measuring wastewater concentration as in claim 2, further comprising a pH-adjusting reagent supply that has a fourth pipeline and is communicated with the measuring tank via the fourth pipeline.

(Claim 4) 4. The apparatus of measuring wastewater concentration as in claim 1, further comprising a stirrer installed in the mixing tank.

(Claim 5) 5. The apparatus of measuring wastewater concentration as in claim 1, further comprising a stirrer installed in the measuring tank.

(Claim 6) 6. The apparatus of measuring wastewater concentration as in claim 1, further comprising a first control valve, a second control valve, and a third control valve, wherein, the first control valve is installed on the first pipeline between the mixing tank and the measuring tank, the second control valve is installed on the second pipeline between the water supply unit and the mixing tank, and the third control valve is installed on the third pipeline between the wastewater supply unit and the mixing tank.

(Claim 7) 7. The apparatus of measuring wastewater concentration as in claim 6, wherein the controller is electronically connected with the first control valve, the second control valve and the third control valve, respectively, and operating status of the first control valve, the second control valve and the third control valve is displayed on the monitor.

(Claim 8) 8. A method of measuring wastewater concentration for determining a discharge rate of wastewater from a wastewater- collecting tank, the method comprising steps of:

taking a certain amount of the wastewater from a wastewater- collecting tank to be diluted with a certain amount of water so as to obtain a first mixture; and

measuring a concentration of the first mixture by using a concentration detector, for calculating a real concentration of the wastewater in the wastewater- collecting tank and then determining a discharge rate of the wastewater from the wastewater- collecting tank.

(Claim 9) 9. The method of measuring wastewater concentration as in claim 8, wherein, if the concentration of the first mixture is measured by the concentration detector as equal to an upper threshold of the concentration detector, the method further comprising steps of:

retaking a certain amount of the wastewater from the wastewater-collecting tank to be further diluted with a certain amount of water so as to form a second mixture; and

measuring a concentration of the second mixture by using the concentration detector, for calculating the real concentration of wastewater in the wastewater-collecting tank and then determining the discharge rate of the wastewater from the wastewater-collecting tank.

(Claim 10) 10. The method of measuring wastewater concentration as in claim 8, wherein the step of measuring concentration of the first mixture further comprises a step of measuring a pH value of the mixture.

(Claim 11) 11. The method of measuring wastewater concentration as in claim 10, wherein, if the pH value of the first mixture is not between 5 and 9, a pH-adjusting reagent is added into the first mixture to adjust the pH value, and the first mixture is discharged thereafter.